Does Internet Banking Option Substitute Traditional Banking System? Empirical Study Of State Bank of India’s Customers at Vadodara City

Dr. Nimeshkumar R Joshi, Dr. Sandipkumar G. Prajapati,
Professor, School Of Business Auro University, Surat, Gujarat, India
Assistant Professor, Department of Commerce and Business Management, Faculty of Commerce, The Maharaja Sayajirao University of Baroda, Vadodara.

ABSTRACT

Internet banking can be defined as a facility provided by banking and financial institutions that enable the user to execute bank related transactions through the Internet. Internet banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Today, the click of the mouse offers customers banking services at a much lower cost and also empowers them with unprecedented freedom in choosing vendors for their financial service needs. Internet banking allows customers to monitor accounts, download transactions, transfer funds between accounts, and handle loan activity, including applications and repayments. The primary objective of the research is to know about customers’ perspectives towards Internet banking services of SBI Bank. A structured questionnaire was used to collect primary data. Both primary, as well as secondary data sources, were used to prepare this paper. Nonprobability convenient sampling was used as a sampling method. A total of 200 respondents were selected. In inferential statistics applied to make the analysis more worthy. The result identifies several demographic factors that influence the adoption of internet banking over traditional banking systems.

Keywords: Adoption, Consumer Behavior, Internet Banking, Security perception, Perceived Risk, State Bank of India.

1 Introduction

(DeYoung, 2001) “Internet banking is an alternative method to perform various banking services, instead of having to drive to the bank itself. Internet banking is an online platform that allows customers to conduct their financial transactions on a secure website that is operated by their bank. For a customer to access internet banking, he/she requires a customer number and password provided by the bank upon application.”

( Sparks, 2017) “The first known deployment of home computer banking to consumers came in December 1980 at United American Bank, a community bank headquartered in Knoxville, Tenn. United American partnered with Radio Shack to produce a secure custom modem for its TRS-80 computer that would allow bank customers to access account information securely. Services available in its first year included bill pay, account balance checks, and loan applications, as well as game access, budget and tax calculators, and daily newspapers. Thousands of customers paid $25-30 per month for the service. In 1998, ICICI Bank introduced internet banking to its customers.”

Citibank and HDFC Bank followed with internet banking services in 1999. The Government of India enacted the IT Act, 2000 with effect from October 17, 2000, which provided legal recognition to electronic transactions and other means of electronic commerce.

The State Bank of India (SBI) is an Indian multinational, public sector banking and financial services statutory body. It is a government corporation statutory body headquartered in Mumbai, Maharashtra. SBI is ranked 236th in the Fortune Global 500 list of the world’s biggest corporations of 2019. It is the largest bank in India with a 23% market share in assets, besides a share of one-fourth of the total loan and deposits market.

The roots of the State Bank of India lie in the first decade of the 19th century when the Bank of Calcutta later renamed the Bank of Bengal, was established on 2 June 1806. The Bank of Bengal was one of three Presidency
banks, the other two being the Bank of Bombay (incorporated on 15 April 1840) and the Bank of Madras (incorporated on 1 July 1843). All three Presidency banks were incorporated as joint-stock companies and were the result of royal charters. These three banks received the exclusive right to issue paper currency till 1861 when, with the Paper Currency Act, the right was taken over by the Government of India. The Presidency banks amalgamated on 27 January 1921, and the re-organized banking entity took as its name Imperial Bank of India. The Imperial Bank of India remained a joint-stock company but without Government participation. According to the provisions of the State Bank of India Act of 1955, the Reserve Bank of India, which is India’s central bank, acquired a controlling interest in the Imperial Bank of India. On 1 July 1955, the Imperial Bank of India became the State Bank of India. In 2008, the Government of India acquired the Reserve Bank of India’s stake in SBI to remove any conflict of interest because the RBI is the country’s banking regulatory authority.³

State bank of India introduced Internet Banking services in July 2001. Through its portal www.onlinesbi.com, OnlineSBI is the Internet banking portal for State Bank of India. The portal provides anywhere, anytime, online access to accounts for State Bank’s Retail and Corporate customers. The application is developed using the latest cutting edge technology and tools. SBI also comes with YONO App. With the YONO app, customers only need one app for all their banking, shopping, and investment needs. yono app is a one-stop-shop to fulfill all banking, insurance, investments, and daily shopping needs of the customers.

2 Literature Review:

Internet banking adoption has gained special attention in academic studies during the past years to investigate factors of adoption. Three of the most important theories used by researchers in the study of individual’s adoption of Internet banking is (Davis F.D., 1989) “Technology Acceptance Model (TAM)” (Pikkarainen T., 2004); (Cheng T., 2006), Theory of Reasoned Action (TRA) originally proposed by (Ajzen M. F., 1975); (Gefen, 2003) and Theory of Planned Behaviour (TPB) originally proposed by (Ajzen, 1991). The Theory of Reasoned Action (TRA), developed by (Ajzen M. F., 1975), is probably one of the most influential theories used to explain human behavior. According to this theory, behavioral intention can be explained by the attitude towards behavior and subjective norm. The attitude towards behavior is defined as an individual’s positive or negative feelings (evaluative effect) about performing the target behavior. Subjective norm refers to a perception that most people who matter to the individual think that he either should or should not perform the behavior in question” (Ajzen M. F., 1975). The Theory of Planned Behavior (TPB) was proposed by (Ajzen I., 1991) as an extension of TRA (Ajzen M. F., 1975) for situations where people have incomplete volitional control. This suggests that a central factor in human behavior is a behavioral intention, which is affected by attitude toward behavior, subjective norm, and perceived behavioral control. This construct reflects how people perceive the internal and external limitations to their behavior. It refers to how easy or difficult people believe it would be to perform certain behaviors.

(Sharma, 2009) found that “perceived ease of use (PEU) had a significant positive effect on behavioral intention.” This finding refers to the fact that users who have higher computer self-efficacy are likely to have more positive PEU. (Tsaiakis, 2005) Perceived usefulness is one of the components of that e-payment transactions will be processed under their expectations. It is defined in terms of the individual’s perception of the security of the system; the service provider’s reputation; loss of privacy; and concerns about risks associated with the reliability of Indian Banking (IB). Trust can be defined as a user’s confident belief in a bank’s honesty toward the user. (Pavlou, 2003) The distant and impersonal nature of the online environment and the implicit uncertainty of using a global open infrastructure for transactions have rendered risk an inevitable element of e-commerce. The main components of Perceived risk (PR) are perceived security and trust, which have emerged as the top issues inhibiting IB adoption. This construct reflects an individual’s subjective belief about the possible negative consequences of some type of planned action, due to inherent uncertainty which is likely to negatively influence usage intentions. Trust is at the heart of all kinds of relationships.

3 Conceptual Model:

These different kinds of literature and theories contributing to our understanding of the factors influencing consumer’s adoption of internet banking. Following Figure 1 denotes the research model. It divides the factors which are hypothesized to influence the individual’s decision to adopt internet banking into six

main categories: convenience, security perception, prior internet knowledge, perceived risk, information on online banking, and demographics characteristics.

Figure 1 Conceptual Model

Following is the list of hypotheses framed base on the conceptual model.
1. Ho: There is a significant difference in the demographic variables of the customers of SBI Bank and their views about the availability of internet banking on Mobile Phones.
2. Ho: There is a significant difference in the demographic variables of the customers of SBI Bank and their views about the preference to use Retail Internet Banking.
3. Ho: There is a significant difference in the demographic variables of the customers of SBI Bank and their views about the experience of Retail Internet Banking.
4. Ho: There is a significant difference in the demographic variables of the customers of SBI Bank and their perception about the security of retail Internet Banking transactions.
5. Ho: There is a significant difference in the demographic variables of the customers of SBI Bank and their perception of the risk of retail Internet Banking transactions.

4 Research Methodology:
The primary objective of the paper was to find the perception of the respondent about internet banking over the traditional banking system. Some of the ancillary objectives are to know the relationship between various demographic variables of the respondents and their perception of internet banking, perceived risk for internet banking, perception about service security, etc. A descriptive single cross-sectional research design was used. Both primary and secondary data sources were used to prepare this paper. A nonprobability convenience sampling method was used to select respondents. Primary data was collected from the sample of 200, out of which 100 belongs to urban areas of Vadodara while 100 of them are from rural areas around the Vadodara. One of the limitations of this study is the only customers of SBI Bank of Vadodara city is only covered for the preparation of this paper, so the outcome may not be generalized to other cities of Gujarat.

5 Data Analysis:
Demographic Details -
Total sample 200 respondents were taken; out of which 100 were living in urban areas of Vadodara while 100 from the rural areas of Vadodara. 119 of them are male while 81 of them are female. The mean age of the sample was 37.5, and the mean monthly family income of the respondents was 64,000. 40% of the respondents are graduate 38% are postgraduate and 16% of them are undergraduate. 40% of the respondents are live in a joint family structure while 60% are in a nuclear family structure.

Reliability - Cronbach's alpha is done to test the reliability of the factors. Factors are reliable when Cronbach's alpha is greater than 0.60. Here the Cronbach's alpha is .781 so we can say that the factors are reliable.

Hypothesis Test: The following hypothesis was tested.
Table 1.1 List of Hypothesis Tested

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Hypothesis</th>
<th>Demographic Variable</th>
<th>Significance Value</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Frequency of using Internet banking</td>
<td>Gender</td>
<td>0.012</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age Group</td>
<td>0.036</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area / Location</td>
<td>0.171</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupation</td>
<td>0.001</td>
<td>Rejected</td>
</tr>
<tr>
<td>2</td>
<td>experience of Retail Internet Banking</td>
<td>Gender</td>
<td>0.020</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age Group</td>
<td>0.217</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area / Location</td>
<td>0.110</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupation</td>
<td>0.021</td>
<td>Rejected</td>
</tr>
<tr>
<td>3</td>
<td>security of retail Internet Banking transaction</td>
<td>Gender</td>
<td>0.004</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age Group</td>
<td>0.102</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area / Location</td>
<td>0.267</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupation</td>
<td>0.132</td>
<td>Accepted</td>
</tr>
<tr>
<td>4</td>
<td>risk of retail Internet Banking transactions.</td>
<td>Gender</td>
<td>0.000</td>
<td>Rejected</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Age Group</td>
<td>0.325</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Area / Location</td>
<td>0.728</td>
<td>Accepted</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Occupation</td>
<td>0.830</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

**MANOVA Test**- MANOVA is a multivariate extension of the univariate techniques used for measuring the differences between group means. As stated by Hair et al. (1998) “MANOVA is a statistical technique that can be used to simultaneously explore the relationship between several categorical independent variables (usually referred to as treatments) and two or more metric variables.”

To measure significant difference related to the independent variables, one Multivariate Analysis of Variance (MANOVA) test with repeated measures were conducted. The MANOVA and subsequent ANOVA results are shown in the table, and it was found that there is a statistically significant difference between the area of respondents and the services of internet banking. Services of internet banking (i.e. E-payments, Direct access and E-statements) for the three dependent variables of internet banking i.e. E-payments, Direct Access, E-statement (Wilk’s Lamda = 0.893; Significance: p = 0.004 < 0.05). As indicated in Table, the univariate F-ratio were also significant for the two dependent variables i.e. E-payments (F=6.257, Sign. = 0.014), Direct access (F=5.362, Sign. = 0.022) and significant on E-statements (F=1.132, Sign. = 0.290).

**Factor Analysis**- the KMO measure of sampling adequacy for the various attributes categories measured 0.566, which indicates the scale is appropriated and helps in extracting the factor. The ideal measure for this test (KMO > 0.40) and here, in this case, KMO is 0.566 indicates the variable is measuring a common factor.

<table>
<thead>
<tr>
<th>Factor Loading (Items)</th>
<th>Loading</th>
<th>Factor Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demate a/c statement</td>
<td>.736</td>
<td>E-Payments</td>
</tr>
<tr>
<td>Bill Payment</td>
<td>.724</td>
<td></td>
</tr>
<tr>
<td>Tax Payment</td>
<td>.721</td>
<td>Direct access</td>
</tr>
<tr>
<td>Ecommerce</td>
<td>.763</td>
<td></td>
</tr>
<tr>
<td>Fund transfer including inter Bank</td>
<td>.734</td>
<td></td>
</tr>
<tr>
<td>Other including e-FD/e-RD</td>
<td>.519</td>
<td></td>
</tr>
<tr>
<td>Enquiry/Statement</td>
<td>.912</td>
<td>E-Statement</td>
</tr>
</tbody>
</table>
From factor analysis, we can divide the factors into three primary factors. Factor 1 consists of the E-payment related services, while factor 2 consists of direct access services, and the third factor is related to E-Statement services.

6 Findings:
There is a significant difference between Rural and Urban customers about their preference for internet banking services. In both, the areas respondents have rated differently about the e-services. This study shows that area has a significant impact on adopting and preferring internet banking service by customers. There is a significant difference in customers of urban & rural areas about their frequency of using internet banking. There is a significant difference in customers of urban & rural areas about the availability of internet banking on Mobile Phone and now people of these two areas are also aware of mobile banking.

There is no significant difference between males and females about the preference of using internet banking. The study shows that males and females both are adopting internet banking in the same manner. It means gender doesn’t have any impact on the use of internet banking. There is no significant difference in the gender of the customer and the availability of internet banking on Mobile Phones. It shows that females are also getting aware of the internet and mobile banking.

There is a significant, direct, and moderating effect of age on the behavioral intention, adoption, and usage behaviors (Harris, 2000) There is the significant difference among customers of various age groups about the level of security in the internet banking and also shows the difference in the awareness of customers of various age groups about awareness of the of internet banking available on Mobile Phone.

There is no significant difference in the occupation of customers and their frequency of using internet banking. But, there is no significant difference in the occupation of customers and their security of internet banking.

7 Suggestions:
From the analysis, it was found that people less than 40 years of age are more aware of e-banking and its usages. As for elders the banks can create awareness programs and clear their doubt and fear about the e-banking process, so that they may get more depositors/customers to make their transactions through e-banking. RBI should stop physical cheque clearance beyond a certain amount. So that we can increase electronic transactions, businessmen and job holders are using and aware of e-banking, so the banks can provide some additional/extra privilege to these customers to motivate others. The other major problem is the lack of customer education and awareness about the features and benefits of e-payment in rural areas. So there should be an arrangement of systematic educational campaigns/programs to educate them.

8 Conclusion:
Internet banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Today, the click of the mouse offers customers banking services at a much lower cost and also empowers them with unprecedented freedom in choosing vendors for their financial service needs. The banking industry has been a leader in the e-business world in recent years. Demographic and socio-economic characteristics have a significant impact on customers’ attitudes and behavior regarding banking on the internet. The literature identifies several demographic factors that influence the adoption of internet banking including age, gender, and occupation. Younger consumers value the convenience of online banking and also regarded the lack of face to face contact as less important than older persons. Customers of various age groups show the difference in their opinion about security in internet banking. Occupation is a factor that affects the adoption of Internet banking, and which can provide a basis for establishing the difference between Internet banking adopters and non-adopters. At last, we can say in near future internet banking options substitute the traditional banking system.

Bibliography


